

Sang-Hyun Oh

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

165
papers

9,019
citations

49
h-index

91
g-index

179
ext. papers

10,585
ext. citations

8.7
avg, IF

6.29
L-index

#	Paper	IF	Citations
165	Advances and applications of nanophotonic biosensors.. <i>Nature Nanotechnology</i> , 2022 , 17, 5-16	28.7	38
164	Dielectrophoresis of Single Molecules. <i>Nanostructure Science and Technology</i> , 2022 , 207-232	0.9	
163	Open-channel microfluidics via resonant wireless power transfer.. <i>Nature Communications</i> , 2022 , 13, 1869	17.4	2
162	Sensitivity of resonance frequency in the detection of thin layer using nano-slit structures. <i>IMA Journal of Applied Mathematics</i> , 2021 , 86, 146-164	1	
161	Launching graphene surface plasmon waves with vanishingly small periodic grating structures. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2021 , 38, 556-563	1.8	2
160	Plasmonic Split-Trench Resonator for Trapping and Sensing. <i>ACS Nano</i> , 2021 , 15, 6669-6677	16.7	11
159	Nano-Optical Tweezers: Methods and Applications for Trapping Single Molecules and Nanoparticles. <i>ChemPhysChem</i> , 2021 , 22, 1409-1420	3.2	3
158	Nanophotonic biosensors harnessing van der Waals materials. <i>Nature Communications</i> , 2021 , 12, 3824	17.4	31
157	Nano-Optical Tweezers: Methods and Applications for Trapping Single Molecules and Nanoparticles. <i>ChemPhysChem</i> , 2021 , 22, 1408	3.2	
156	Nanogap dielectrophoresis combined with buffer exchange for detecting protein binding to trapped bioparticles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 611, 125829	5.1	0
155	Ultrastrong plasmon-phonon coupling via epsilon-near-zero nanocavities. <i>Nature Photonics</i> , 2021 , 15, 125-130	33.9	32
154	Escalated Photocurrent with Excitation Energy in Dual-Gated MoTe. <i>Nano Letters</i> , 2021 , 21, 1976-1981	11.5	1
153	Ultraflat Sub-10 Nanometer Gap Electrodes for Two-Dimensional Optoelectronic Devices. <i>ACS Nano</i> , 2021 , 15, 5276-5283	16.7	5
152	Real-space imaging of acoustic plasmons in large-area graphene grown by chemical vapor deposition. <i>Nature Communications</i> , 2021 , 12, 938	17.4	11
151	Impact of Surface Roughness in Nanogap Plasmonic Systems. <i>ACS Photonics</i> , 2020 , 7, 908-913	6.3	14
150	Plasmonic Gas Sensing with Graphene Nanoribbons. <i>Physical Review Applied</i> , 2020 , 13,	4.3	17
149	Coupled-mode theory for plasmonic resonators integrated with silicon waveguides towards mid-infrared spectroscopic sensing. <i>Optics Express</i> , 2020 , 28, 2020-2036	3.3	12

148	Terahertz and infrared nonlocality and field saturation in extreme-scale nanoslits. <i>Optics Express</i> , 2020 , 28, 8701-8715	3.3	2
147	Electrotunable Nanoplasmonics for Amplified Surface Enhanced Raman Spectroscopy. <i>ACS Nano</i> , 2020 , 14, 328-336	16.7	16
146	Image polaritons in boron nitride for extreme polariton confinement with low losses. <i>Nature Communications</i> , 2020 , 11, 3649	17.4	21
145	Mode-Matching Enhancement of Second-Harmonic Generation with Plasmonic Nanopatch Antennas. <i>ACS Photonics</i> , 2020 , 7, 3333-3340	6.3	5
144	Bandgap engineering of two-dimensional semiconductor materials. <i>Npj 2D Materials and Applications</i> , 2020 , 4,	8.8	152
143	Modeling and observation of mid-infrared nonlocality in effective epsilon-near-zero ultranarrow coaxial apertures. <i>Nature Communications</i> , 2019 , 10, 4476	17.4	17
142	Graphene acoustic plasmon resonator for ultrasensitive infrared spectroscopy. <i>Nature Nanotechnology</i> , 2019 , 14, 313-319	28.7	125
141	Kinetics of lipid raft formation at lipid monolayer-bilayer junction probed by surface plasmon resonance. <i>Biosensors and Bioelectronics</i> , 2019 , 142, 111568	11.8	5
140	Plasmonic Sensing on Symmetric Nanohole Arrays Supporting High-Q Hybrid Modes and Reflection Geometry. <i>ACS Sensors</i> , 2019 , 4, 3265-3274	9.2	23
139	Nanoscale tweezers for single-cell biopsies. <i>Nature Nanotechnology</i> , 2019 , 14, 80-88	28.7	95
138	Ultrasmall Plasmonic Single Nanoparticle Light Source Driven by a Graphene Tunnel Junction. <i>ACS Nano</i> , 2018 , 12, 2780-2788	16.7	22
137	High-Contrast Infrared Absorption Spectroscopy via Mass-Produced Coaxial Zero-Mode Resonators with Sub-10 nm Gaps. <i>Nano Letters</i> , 2018 , 18, 1930-1936	11.5	63
136	Tunable Graphene Metasurface Reflectarray for Cloaking, Illusion, and Focusing. <i>Physical Review Applied</i> , 2018 , 9,	4.3	56
135	Anisotropic Acoustic Plasmons in Black Phosphorus. <i>ACS Photonics</i> , 2018 , 5, 2208-2216	6.3	32
134	Fast vertical mode expansion method for the simulation of extraordinary terahertz field enhancement in an annular nanogap. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2018 , 35, 30	1.7	2
133	Integrated Nanogap Platform for Sub-Volt Dielectrophoretic Trapping and Real-Time Raman Imaging of Biological Nanoparticles. <i>Nano Letters</i> , 2018 , 18, 5946-5953	11.5	25
132	Resolving molecule-specific information in dynamic lipid membrane processes with multi-resonant infrared metasurfaces. <i>Nature Communications</i> , 2018 , 9, 2160	17.4	103
131	Enhanced Plasmonic Detection with Dielectrophoretic Concentration. <i>Integrated Analytical Systems</i> , 2018 , 123-146	0.4	

130	A hybridizable discontinuous Galerkin method for computing nonlocal electromagnetic effects in three-dimensional metallic nanostructures. <i>Journal of Computational Physics</i> , 2018 , 355, 548-565	4.1	19
129	Lipid Membranes: Curvature Elasticity-Driven Leaflet Asymmetry and Interleaflet Raft Coupling in Supported Membranes (Adv. Mater. Interfaces 23/2018). <i>Advanced Materials Interfaces</i> , 2018 , 5, 1870117 ^{4.6}		
128	Performance metrics and enabling technologies for nanoplasmonic biosensors. <i>Nature Communications</i> , 2018 , 9, 5263	17.4	53
127	Curvature Elasticity-Driven Leaflet Asymmetry and Interleaflet Raft Coupling in Supported Membranes. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1801290	4.6	2
126	A Tunable Nanoplasmonic Mirror at an Electrochemical Interface. <i>ACS Photonics</i> , 2018 , 5, 4604-4616	6.3	14
125	Waveguide-integrated mid-infrared plasmonics with high-efficiency coupling for ultracompact surface-enhanced infrared absorption spectroscopy. <i>Optics Express</i> , 2018 , 26, 23540-23549	3.3	10
124	Surface Plasmon Resonance Sensing on Naturally Derived Membranes: A Remyelination-Promoting Human Antibody Binds Myelin with Extraordinary Affinity. <i>Analytical Chemistry</i> , 2018 , 90, 12567-12573	7.8	3
123	Mobility Anisotropy in Black Phosphorus MOSFETs With HfO ₂ Gate Dielectrics. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 4093-4101	2.9	11
122	Waveguide-Integrated Compact Plasmonic Resonators for On-Chip Mid-Infrared Laser Spectroscopy. <i>Nano Letters</i> , 2018 , 18, 7601-7608	11.5	36
121	Surface Plasmon Resonance Study of the Binding of PEO-PPO-PEO Triblock Copolymer and PEO Homopolymer to Supported Lipid Bilayers. <i>Langmuir</i> , 2018 , 34, 6703-6712	4	13
120	Low-Power Optical Trapping of Nanoparticles and Proteins with Resonant Coaxial Nanoaperture Using 10 nm Gap. <i>Nano Letters</i> , 2018 , 18, 3637-3642	11.5	98
119	Three-Dimensional Integration of Black Phosphorus Photodetector with Silicon Photonics and Nanoplasmonics. <i>Nano Letters</i> , 2017 , 17, 985-991	11.5	81
118	Influence of Silver Film Quality on the Threshold of Plasmonic Nanowire Lasers. <i>Advanced Optical Materials</i> , 2017 , 5, 1600856	8.1	21
117	High-Performance Black Phosphorus MOSFETs Using Crystal Orientation Control and Contact Engineering. <i>IEEE Electron Device Letters</i> , 2017 , 38, 685-688	4.4	17
116	Cyclical Thinning of Black Phosphorus with High Spatial Resolution for Heterostructure Devices. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 12654-12662	9.5	10
115	Three-Dimensional Anisotropic Metamaterials as Triaxial Optical Inclinoimeters. <i>Scientific Reports</i> , 2017 , 7, 2680	4.9	10
114	Graphene-edge dielectrophoretic tweezers for trapping of biomolecules. <i>Nature Communications</i> , 2017 , 8, 1867	17.4	51
113	Split-Wedge Antennas with Sub-5 nm Gaps for Plasmonic Nanofocusing. <i>Nano Letters</i> , 2016 , 16, 7849-7856 ^{5.5}	16.5	45

112	Multimodal Photodiode and Phototransistor Device Based on Two-Dimensional Materials. <i>ACS Nano</i> , 2016 , 10, 10500-10506	16.7	9
111	Plasmonic Cup Resonators for Single-Nanohole-Based Sensing and Spectroscopy. <i>ACS Photonics</i> , 2016 , 3, 1202-1207	6.3	5
110	Self-Assembled Multifunctional 3D Microdevices. <i>Advanced Electronic Materials</i> , 2016 , 2, 1500459	6.4	18
109	Dielectrophoresis-Assisted Raman Spectroscopy of Intravesicular Analytes on Metallic Pyramids. <i>Analytical Chemistry</i> , 2016 , 88, 1704-10	7.8	11
108	Nanopore sensing at ultra-low concentrations using single-molecule dielectrophoretic trapping. <i>Nature Communications</i> , 2016 , 7, 10217	17.4	172
107	Infrared Plasmonic Biosensor for Real-Time and Label-Free Monitoring of Lipid Membranes. <i>Nano Letters</i> , 2016 , 16, 1502-8	11.5	117
106	High-Throughput Fabrication of Resonant Metamaterials with Ultrasmall Coaxial Apertures via Atomic Layer Lithography. <i>Nano Letters</i> , 2016 , 16, 2040-6	11.5	67
105	Template-Stripped Multifunctional Wedge and Pyramid Arrays for Magnetic Nanofocusing and Optical Sensing. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 9319-26	9.5	12
104	Recent Advances in Monoclonal Antibody Therapies for Multiple Sclerosis. <i>Expert Opinion on Biological Therapy</i> , 2016 , 16, 827-839	5.4	16
103	Plasmonic Nanohole Sensor for Capturing Single Virus-Like Particles toward Virucidal Drug Evaluation. <i>Small</i> , 2016 , 12, 1159-66	11	47
102	Continuity of Monolayer-Bilayer Junctions for Localization of Lipid Raft Microdomains in Model Membranes. <i>Scientific Reports</i> , 2016 , 6, 26823	4.9	11
101	Self-aligned grating couplers on template-stripped metal pyramids via nanostencil lithography. <i>Applied Physics Letters</i> , 2016 , 108, 213106	3.4	2
100	Gap Plasmon Enhanced Metasurface Third-Harmonic Generation in Transmission Geometry. <i>ACS Photonics</i> , 2016 , 3, 1461-1467	6.3	26
99	Size-Reduction Template Stripping of Smooth Curved Metallic Tips for Adiabatic Nanofocusing of Surface Plasmons. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 13624-9	9.5	6
98	Fundamental Limits on the Subthreshold Slope in Schottky Source/Drain Black Phosphorus Field-Effect Transistors. <i>ACS Nano</i> , 2016 , 10, 3791-800	16.7	55
97	Launching surface plasmon waves via vanishingly small periodic gratings. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2016 , 33, 276-85	1.8	16
96	On-Demand Surface- and Tip-Enhanced Raman Spectroscopy Using Dielectrophoretic Trapping and Nanopore Sensing. <i>ACS Photonics</i> , 2016 , 3, 1036-1044	6.3	30
95	Ultralow-Power Electronic Trapping of Nanoparticles with Sub-10 nm Gold Nanogap Electrodes. <i>Nano Letters</i> , 2016 , 16, 6317-6324	11.5	44

94	Perfect Extinction of Terahertz Waves in Monolayer Graphene over 2-nm-Wide Metallic Apertures. <i>Advanced Optical Materials</i> , 2015 , 3, 667-673	8.1	22
93	Applications of plasmonics: general discussion. <i>Faraday Discussions</i> , 2015 , 178, 435-66	3.6	11
92	Surface plasmon enhanced spectroscopies and time and space resolved methods: general discussion. <i>Faraday Discussions</i> , 2015 , 178, 253-79	3.6	2
91	High-density metallic nanogap arrays for the sensitive detection of single-walled carbon nanotube thin films. <i>Faraday Discussions</i> , 2015 , 178, 195-201	3.6	11
90	Template-Stripped Tunable Plasmonic Devices on Stretchable and Rollable Substrates. <i>ACS Nano</i> , 2015 , 9, 10647-54	16.7	61
89	Naturally Occurring Monoclonal Antibodies and Their Therapeutic Potential for Neurologic Diseases. <i>JAMA Neurology</i> , 2015 , 72, 1346-53	17.2	15
88	Low-temperature enhancement of plasmonic performance in silver films. <i>Optical Materials Express</i> , 2015 , 5, 1147	2.6	28
87	Location-specific nanoplasmonic sensing of biomolecular binding to lipid membranes with negative curvature. <i>Nanoscale</i> , 2015 , 7, 15080-5	7.7	22
86	Influence of the Evanescent Field Decay Length on the Sensitivity of Plasmonic Nanodisks and Nanoholes. <i>ACS Photonics</i> , 2015 , 2, 256-262	6.3	74
85	Nanogap-enhanced infrared spectroscopy with template-stripped wafer-scale arrays of buried plasmonic cavities. <i>Nano Letters</i> , 2015 , 15, 107-13	11.5	113
84	Terahertz Waves: Perfect Extinction of Terahertz Waves in Monolayer Graphene over 2-nm-Wide Metallic Apertures (Advanced Optical Materials 5/2015). <i>Advanced Optical Materials</i> , 2015 , 3, 714-714	8.1	1
83	Fine tuning of nanopipettes using atomic layer deposition for single molecule sensing. <i>Analyst</i> , 2015 , 140, 4828-34	5	27
82	Lipid Membrane Deformation Accompanied by Disk-to-Ring Shape Transition of Cholesterol-Rich Domains. <i>Journal of the American Chemical Society</i> , 2015 , 137, 8692-5	16.4	13
81	A natural human IgM that binds to gangliosides is therapeutic in murine models of amyotrophic lateral sclerosis. <i>DMM Disease Models and Mechanisms</i> , 2015 , 8, 831-42	4.1	25
80	Nanohole Array-Directed Trapping of Mammalian Mitochondria Enabling Single Organelle Analysis. <i>Analytical Chemistry</i> , 2015 , 87, 11973-7	7.8	11
79	Human-derived natural antibodies: biomarkers and potential therapeutics. <i>Future Neurology</i> , 2015 , 10, 25-39	1.5	12
78	Nanogap-Enhanced Terahertz Sensing of 1 nm Thick ($\epsilon=106$) Dielectric Films. <i>ACS Photonics</i> , 2015 , 2, 417-424	6.4	64
77	Polarization interferometry for real-time spectroscopic plasmonic sensing. <i>Nanoscale</i> , 2015 , 7, 4226-33	7.7	13

76	Surface passivation of a photonic crystal band-edge laser by atomic layer deposition of SiO ₂ and its application for biosensing. <i>Nanoscale</i> , 2015 , 7, 3565-71	7.7	11
75	Applications of SPR for the characterization of molecules important in the pathogenesis and treatment of neurodegenerative diseases. <i>Expert Review of Neurotherapeutics</i> , 2014 , 14, 449-63	4.3	19
74	Third-Harmonic Generation Enhancement by Film-Coupled Plasmonic Stripe Resonators. <i>ACS Photonics</i> , 2014 , 1, 1212-1217	6.3	96
73	Dielectrophoresis-enhanced plasmonic sensing with gold nanohole arrays. <i>Nano Letters</i> , 2014 , 14, 2006-2015	12.5	128
72	Rapid and Sensitive in Situ SERS Detection Using Dielectrophoresis. <i>Chemistry of Materials</i> , 2014 , 26, 2445-2452	9.6	37
71	Individual Template-Stripped Conductive Gold Pyramids for Tip-Enhanced Dielectrophoresis. <i>ACS Photonics</i> , 2014 , 1, 464-470	6.3	25
70	Reconstituting ring-rafts in bud-mimicking topography of model membranes. <i>Nature Communications</i> , 2014 , 5, 4507	17.4	32
69	Formation of biomembrane microarrays with a squeegee-based assembly method. <i>Journal of Visualized Experiments</i> , 2014 ,	1.6	1
68	Squeezing millimeter waves through a single, nanometer-wide, centimeter-long slit. <i>Scientific Reports</i> , 2014 , 4, 6722	4.9	28
67	Fast high-order perturbation of surfaces methods for simulation of multilayer plasmonic devices and metamaterials. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2014 , 31, 1820-31	1.8	11
66	Field enhancement and saturation of millimeter waves inside a metallic nanogap. <i>Optics Express</i> , 2014 , 22, 14402-10	3.3	13
65	Oxidation sharpening, template stripping, and passivation of ultra-sharp metallic pyramids and wedges. <i>Small</i> , 2014 , 10, 680-4	11	13
64	Film-coupled nanoparticles by atomic layer deposition: Comparison with organic spacing layers. <i>Applied Physics Letters</i> , 2014 , 104, 023109	3.4	45
63	Millimeter-Sized Suspended Plasmonic Nanohole Arrays for Surface-Tension-Driven Flow-Through SERS. <i>Chemistry of Materials</i> , 2014 , 26, 6523-6530	9.6	47
62	Spatial coherence in near-field Raman scattering. <i>Physical Review Letters</i> , 2014 , 113, 186101	7.4	55
61	Plasmonic nanofocusing with a metallic pyramid and an integrated C-shaped aperture. <i>Scientific Reports</i> , 2013 , 3, 1857	4.9	35
60	Nanoscale fluorescence lifetime imaging of an optical antenna with a single diamond NV center. <i>Nano Letters</i> , 2013 , 13, 3807-11	11.5	70
59	Tip-based plasmonics: squeezing light with metallic nanoprobles. <i>Laser and Photonics Reviews</i> , 2013 , 7, 453-477	8.3	35

58	Atomic layer lithography of wafer-scale nanogap arrays for extreme confinement of electromagnetic waves. <i>Nature Communications</i> , 2013 , 4, 2361	17.4	217
57	Fabrication of smooth patterned structures of refractory metals, semiconductors, and oxides via template stripping. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 9701-8	9.5	26
56	Promises and Challenges of Nanoplasmonic Devices for Refractometric Biosensing. <i>Nanophotonics</i> , 2013 , 2, 83-101	6.3	74
55	Full Wave Modelling of Light Propagation and Reflection. <i>Computer Graphics Forum</i> , 2013 , 32, 24-37	2.4	20
54	Self-assembled plasmonic nanoring cavity arrays for SERS and LSPR biosensing. <i>Advanced Materials</i> , 2013 , 25, 2678-85	24	188
53	Thermal Stability of Gold Nanorods for High-Temperature Plasmonic Sensing. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 11718-11724	3.8	37
52	Topographically Flat Substrates with Embedded Nanoplasmonic Devices for Biosensing. <i>Advanced Functional Materials</i> , 2013 , 23, 2812-2820	15.6	30
51	Template-stripped asymmetric metallic pyramids for tunable plasmonic nanofocusing. <i>Nano Letters</i> , 2013 , 13, 5635-41	11.5	36
50	Nanopore-induced spontaneous concentration for optofluidic sensing and particle assembly. <i>Analytical Chemistry</i> , 2013 , 85, 971-7	7.8	26
49	A fast and high-order accurate surface perturbation method for nanoplasmonic simulations: basic concepts, analytic continuation and applications. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2013 , 30, 2175-87	1.8	7
48	A patterned recombinant human IgM guides neurite outgrowth of CNS neurons. <i>Scientific Reports</i> , 2013 , 3, 2267	4.9	14
47	Self-Assembled Plasmonic Nanoring Cavity Arrays for SERS and LSPR Biosensing (Adv. Mater. 19/2013). <i>Advanced Materials</i> , 2013 , 25, 2677-2677	24	3
46	Optical dielectric function of gold. <i>Physical Review B</i> , 2012 , 86,	3.3	518
45	Atomic layer deposition (ALD): A versatile technique for plasmonics and nanobiotechnology. <i>Journal of Materials Research</i> , 2012 , 27, 663-671	2.5	47
44	High-density arrays of submicron spherical supported lipid bilayers. <i>Analytical Chemistry</i> , 2012 , 84, 8207-13	1.3	12
43	Effect of Nanohole Spacing on the Self-Imaging Phenomenon Created by the Three-Dimensional Propagation of Light through Periodic Nanohole Arrays. <i>Journal of Physical Chemistry C</i> , 2012 , 116,	3.8	9
42	Ultrasoother metallic films with buried nanostructures for backside reflection-mode plasmonic biosensing. <i>Annalen Der Physik</i> , 2012 , 524, 687-696	2.6	34
41	Highly reproducible near-field optical imaging with sub-20-nm resolution based on template-stripped gold pyramids. <i>ACS Nano</i> , 2012 , 6, 9168-74	16.7	113

40	Nanohole-based surface plasmon resonance instruments with improved spectral resolution quantify a broad range of antibody-ligand binding kinetics. <i>Analytical Chemistry</i> , 2012 , 84, 1941-7	7.8	84
39	High-affinity binding of remyelinating natural autoantibodies to myelin-mimicking lipid bilayers revealed by nanohole surface plasmon resonance. <i>Analytical Chemistry</i> , 2012 , 84, 6031-9	7.8	33
38	Linewidth-Optimized Extraordinary Optical Transmission in Water with Template-Stripped Metallic Nanohole Arrays. <i>Advanced Functional Materials</i> , 2012 , 22, 4439-4446	15.6	47
37	Single-crystalline silver films for plasmonics. <i>Advanced Materials</i> , 2012 , 24, 3988-92	24	100
36	Engineering metallic nanostructures for plasmonics and nanophotonics. <i>Reports on Progress in Physics</i> , 2012 , 75, 036501	14.4	366
35	Real-time full-spectral imaging and affinity measurements from 50 microfluidic channels using nanohole surface plasmon resonance. <i>Lab on A Chip</i> , 2012 , 12, 3882-90	7.2	65
34	Improved dielectric functions in metallic films obtained via template stripping. <i>Applied Physics Letters</i> , 2012 , 100, 081105	3.4	22
33	Recent progress in SERS biosensing. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 11551-67	3.6	488
32	Template-stripped smooth Ag nanohole arrays with silica shells for surface plasmon resonance biosensing. <i>ACS Nano</i> , 2011 , 5, 6244-53	16.7	177
31	Facile assembly of micro- and nanoarrays for sensing with natural cell membranes. <i>ACS Nano</i> , 2011 , 5, 7555-64	16.7	44
30	Monolithic integration of continuously tunable plasmonic nanostructures. <i>Nano Letters</i> , 2011 , 11, 3526-30	11.5	54
29	Self-assembled plasmonic electrodes for high-performance organic photovoltaic cells. <i>Applied Physics Letters</i> , 2011 , 99, 103306	3.4	26
28	Vertically oriented sub-10-nm plasmonic nanogap arrays. <i>Nano Letters</i> , 2010 , 10, 2231-6	11.5	340
27	Three-dimensional plasmonic nanofocusing. <i>Nano Letters</i> , 2010 , 10, 1369-73	11.5	152
26	Membrane protein biosensing with plasmonic nanopore arrays and pore-spanning lipid membranes. <i>Chemical Science</i> , 2010 , 1, 688-696	9.4	110
25	Atomic layer deposition of dielectric overlayers for enhancing the optical properties and chemical stability of plasmonic nanoholes. <i>ACS Nano</i> , 2010 , 4, 947-54	16.7	83
24	Self-assembled plasmonic nanohole arrays. <i>Langmuir</i> , 2009 , 25, 13685-93	4	139
23	Surface plasmon resonance for high-throughput ligand screening of membrane-bound proteins. <i>Biotechnology Journal</i> , 2009 , 4, 1542-58	5.6	84

22	Plasmonic nanoholes in a multichannel microarray format for parallel kinetic assays and differential sensing. <i>Analytical Chemistry</i> , 2009 , 81, 2854-9	7.8	90
21	Ultrasmooth patterned metals for plasmonics and metamaterials. <i>Science</i> , 2009 , 325, 594-7	33.3	668
20	Plasmonic nano-structures for optical data storage. <i>Optics Express</i> , 2009 , 17, 14001-14	3.3	110
19	Sub-micron resolution surface plasmon resonance imaging enabled by nanohole arrays with surrounding Bragg mirrors for enhanced sensitivity and isolation. <i>Lab on A Chip</i> , 2009 , 9, 382-7	7.2	112
18	Plasmonic nanohole arrays for label-free kinetic biosensing in a lipid membrane environment. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 1481-4	0.9	4
17	Plasmonic Optical data storage 2009 ,		1
16	Plasmonic Nano-structures for Optical Data Storage 2009 ,		4
15	Laser-illuminated nanohole arrays for multiplex plasmonic microarray sensing. <i>Optics Express</i> , 2008 , 16, 219-24	3.3	93
14	Plasmonic nanohole arrays for real-time multiplex biosensing 2008 ,		9
13	Construction of a Magnetic Biosensor for Pathogen Detection. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2008 , 2,	1.3	2
12	Plasmonic nanocavity arrays for enhanced efficiency in organic photovoltaic cells. <i>Applied Physics Letters</i> , 2008 , 93, 123308	3.4	149
11	Periodic nanohole arrays with shape-enhanced plasmon resonance as real-time biosensors. <i>Applied Physics Letters</i> , 2007 , 90, 243110	3.4	230
10	Periodic modulation of extraordinary optical transmission through subwavelength hole arrays using surrounding Bragg mirrors. <i>Physical Review B</i> , 2007 , 76,	3.3	13
9	Lateral confinement of surface plasmons and polarization-dependent optical transmission using nanohole arrays with a surrounding rectangular Bragg resonator. <i>Applied Physics Letters</i> , 2007 , 91, 253105	3.4	19
8	Microfluidic protein detection through genetically engineered bacterial cells. <i>Journal of Proteome Research</i> , 2006 , 5, 3433-7	5.6	17
7	High-bandwidth radio frequency Coulter counter. <i>Applied Physics Letters</i> , 2005 , 87, 184106	3.4	58
6	Attenuation mechanism effect on filter shape in channelized dynamic spectral equalizers. <i>Applied Optics</i> , 2004 , 43, 127-31	1.7	7
5	. <i>Journal of Microelectromechanical Systems</i> , 2003 , 12, 702-707	2.5	18

4	The vertical replacement-gate (VRG) MOSFET. <i>Solid-State Electronics</i> , 2002 , 46, 939-950	1.7	23
3	The Application of Solid Source Diffusion in the Vertical Replacement-Gate (VRG) MOSFET. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 610, 321		1
2	Analytic description of short-channel effects in fully-depleted double-gate and cylindrical, surrounding-gate MOSFETs. <i>IEEE Electron Device Letters</i> , 2000 , 21, 445-447	4.4	235
1	50 nm Vertical Replacement-Gate (VRG) pMOSFETs		1